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Environmental Assessment

AB 260 (Sub No. 2X) Rarus Railway Company—Abandonment and Discontinuance Exemption—In Deer Lodge County, Montana

Information Contact:
Phillis Johnson-Ball
Environmental Project Manager
Section of Environmental Analysis
Surface Transportation Board
395 E Street S.W.
Washington, D.C. 20423
(202) 245-0304

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<u>Exhibit</u>	<u>Description</u>
A	Vicinity Map, Anaconda/West Valley Rail Line
B	January 25, 2007 Letter from Pam Sbar to Phillis Johnson-Ball Requesting Alternative Environmental Review and April 26, 2007 Letter to Pam Sbar from Victoria Rutson Concurring with Rarus Railway's request for Alternative Environmental Review
C	Unilateral Administrative Order, Anaconda Regional Water, Waste and Soil Operable Unit, Anaconda Smelter Superfund Site
D	Map of Anaconda Smelter Superfund Site and ARWW&S
E	October 31, 2006 Real Property Conveyance Agreement By and Between Atlantic Richfield Company, Rarus Railway Company and BGM Equipment Company and the Montana Department of Transportation
F	Atlantic Richfield Company, 2003. Remedial Design Unit (RDU) 5 Anaconda Active Railroad Beds, Remedial Action Work Plan/Final Design Report (RAWP/FDR), Anaconda Regional Water, Waste & Soils Operable Unit, Anaconda Smelter Superfund Site, Anaconda, MT
G	May 13, 2008 Letter from the Montana Historical Society

EXECUTIVE SUMMARY

Background

On June 2, 2008, Rarus Railway Co. (Rarus) filed a notice of exemption with the Surface Transportation Board (STB or Board) pursuant to 49 CFR 1152.50 seeking authority to abandon and discontinue operations on approximately 4.7 miles of the Anaconda/West Valley Rail Line (AWVRL), which is owned and operated by Rarus. AWVRL is located in and near the city of Anaconda, in Deer Lodge County, Montana. There has been no rail traffic on the AWVRL for over 20 years.

This Environmental Assessment has been prepared to evaluate the potential environmental impacts associated with the proposed abandonment and discontinuance of operations on the AWVRL. If the notice becomes effective, the railroad would be able to salvage track, ties, and other railroad appurtenances and dispose of the right-of-way.

The entire AWVRL lies within the boundaries of the Anaconda Smelter Superfund Site¹ Active Railroad Beds Remedial Design Unit (RDU) of the Anaconda Regional Water, Waste & Soils (ARWW&S) Operable Unit (OU) portion of the Anaconda Smelter Superfund Site. The Anaconda Smelter Superfund Site was established by the EPA to address contamination related to copper concentrating and smelting activities in and around Anaconda, Montana. Environmental cleanup activities along the AWVRL are a portion of the remedial action for the entire Anaconda Smelter Superfund Site. The cleanup activities on the AWVRL are overseen by the EPA, in consultation with the State of Montana's Department of Environmental Quality.

Studies completed by the Respondents², The Atlantic Richfield Company, BGM Equipment Company (BGM), and Rarus, completed as part of the Superfund remediation

¹ Pursuant to Section 105 of CERCLA, EPA listed the Anaconda Smelter Superfund Site on the National Priorities List in September of 1983 at 48 Fed. Reg. 40658.

² Respondents/Potentially Responsible Parties are individuals, companies, or any other parties that are potentially liable for payment of Superfund cleanup costs. Companies that generate hazardous substances disposed of at a Superfund site, current and former owners and operators of the site, and transporters who selected the site for disposal of hazardous substances may be responsible for part or all of the cleanup costs.

investigations at the Anaconda Smelter Superfund Site found that the bed and ballast of the AWWRL contains materials with elevated concentrations of arsenic and other heavy metals.

Remedial designs developed by the Respondents, the Atlantic Richfield Company, BGM Equipment Company (BGM), in conjunction with Rarus, and approved by the EPA for the AWWRL are described in the Remedial Action Work Plan/Final Design Report (RAWP/FDR) for RDU 5³. EPA's cleanup requirements for the AWWRL are defined and addressed in the RDU 5 Active Railroad Beds RAWP/FDR, based on risk-based action levels identified for the Anaconda Active Railroad – Residential, Commercial/Industrial and Open Space Land. The RAWP/FDR for the AWWRL was approved by the EPA and attached to the Unilateral Administrative Order (UAO) issued by EPA. This EPA-ordered remedial action recommends that the potentially responsible parties, respondents, to the UAO -- Rarus and the Atlantic Richfield Company – abandon and salvage the AWWRL rails and ties and excavate and dispose of railroad bed materials in a designated waste management area.

The primary human health and environmental risks of the proposed abandonment and salvage of the railroad right-of-way (ROW) include the potential for transport of arsenic and/or heavy metals from the railroad bed materials in storm water runoff to adjacent public use/residential areas and, in a limited area where the railroad grade crosses the stream, to the adjacent Warm Springs Creek. Additional potential receptor areas of concern, where arsenic in elevated concentrations could potentially cause health risks to humans, are located immediately adjacent to, or within several hundred feet of the railroad ROW.

These are the same potential impacts that are being addressed by EPA's remediation requirements for the AWWRL. EPA has determined that implementation of the remedial action identified in the RDU 5 Active Railroad Beds RAWP/FDR would mitigate the environmental risk of arsenic and heavy metal contamination on down-gradient adjacent lands and, in a limited area, to Warm Springs Creek by limiting or preventing the post-remediation transport of these contaminants in storm water runoff. Additionally, if the rail line is salvaged, as recommended by

³ Atlantic Richfield Company, 2003. Remedial Design Unit (RDU) 5 Anaconda Active Railroad Beds, Remedial Action Work Plan/Final Design Report (RAWP/FDR), Anaconda Regional Water, Waste & Soils Operable Unit, Anaconda Smelter Superfund Site, Anaconda, MT.

EPA's remediation plan, standard engineering controls and best management practices would be used to reduce or eliminate erosion and transport of contaminated railroad bed or ballast materials to adjacent areas or Warm Springs Creek.

The AWWRL is one of several railroad beds that would be remediated under the Anaconda Smelter Superfund Site cleanup. However, the AWWRL is the only railroad bed for which EPA recommended removal of rails, ties and ballast for purposes of remediation. The final EPA-approved remedial design or cleanup plan summarized the detailed analysis of physical impacts to the environment and provided engineering documents that detailed the remedial activities recommended to reduce impacts to humans and the environment.

The AWWRL ROW, as part of the historic Butte, Anaconda & Pacific Historic District, has been identified on the *National Register of Historic Places*. As part of the remediation requirements for the Anaconda Smelter Superfund Site and, in order to comply with the National Historic Preservation Act, two Programmatic Agreements were developed. The First Programmatic Agreement was executed in 1992 by EPA Region VIII, the Montana Department of Environmental Quality (MDEQ), the Atlantic Richfield Company, SHPO, the Advisory Council on Historic Preservation, local governments of Butte/Silver Bow County (BSB), Anaconda/Deer Lodge County (ADLC), the community of Walkerville and the Atlantic Richfield Company to ensure compliance with the National Historic Preservation Act (NHPA). The parties to the First Programmatic Agreement developed the Regional Historic Preservation Plan (1993) which identified the local historic resources and identified their role and concepts for their preservation and enhancement. The Second Programmatic Agreement executed in 1994 with the same parties identified specific measures to mitigate harm to historic resources during implementation of CERCLA response actions. Such mitigation included avoidance, or for those resources that can not be avoided, as is the case with the AWWRL, on-site mitigation or off-site mitigation measures.

The EPA-recommended remedial action for the AWWRL anticipates the salvage of tracks, ties and associated railroad appurtenances and disposal of the AWWRL right-of way, which is an identified historic resource under the Second Programmatic Agreement and is part of

the historic Butte, Anaconda and Pacific Historic District listed on the National Register of Historic Places. No buildings or structures are located along the AWWRL, therefore, no buildings or other structures would be impacted by the remedial action.

In a letter of May 13, 2008 to USEPA, the Montana Historical Society (MHS) states that MHS believes that EPA's compliance with the 1994 Programmatic Agreement and Regional Historic Preservation Plan addresses the Board's obligations under 36 CFR 800 for consideration of impacts to historic properties. Letter from the MHS is attached as Exhibit G.

Conclusion

If the proposed abandonment and authority to discontinue operations is granted, and the cleanup plan as recommended by the EPA is implemented, impacts on the existing environment, the AWWRL and adjacent area, (including cultural resources, wetlands, air, transportation, noise, energy, and safety) would not be significant. Moreover, removal of the rail and ties together with implementation of the EPA-recommended remedy to address contaminated railroad bed and ballast materials are anticipated to have a beneficial effect on the environment by cleaning up the contaminated conditions along the ROW. Conversion of the line, if remediation activities are completed, into transportation, trail and/or utility corridor, would have a beneficial public impact. Denial of the proposed abandonment (leaving the rails, ties and ballast in place) would require the EPA to modify its remediation recommendations for the AWWRL ROW and the contaminants of concern (COCs) would remain in place with the potential for continued release of COCs and environmental degradation. Additionally, the potential use of the ROW as a non-railroad transportation, trail, and/or utility corridor would be precluded. Environmental risks from exposures to arsenic and other heavy metals would continue unabated until an alternative remedial action for the ROW are designed, approved by the EPA and implemented by the Respondents to EPA's Administrative Order.

1.0 INTRODUCTION AND BACKGROUND

1.1 Proposed Action

On June 2, 2008, Rarus Railway Co. (Rarus) filed a notice of exemption with the Surface Transportation Board (STB or Board) pursuant to 49 CFR 1152.50 seeking authority to abandon and discontinue operations on approximate 4.7 miles of the Anaconda/West Valley Rail Line (AWVRLS) which is located in and near the city of Anaconda, in Deer Lodge County, Montana. The line is owned and operated by Rarus. A map depicting the AWVRL and its vicinity is attached as Exhibit A to this Environmental Assessment (EA). If the notice becomes effective, Rarus will be able to salvage track, ties, and other railroad appurtenances and dispose of the right-of-way.

1.2 Description of Line

The AWVRL, as part of the former Butte, Anaconda & Pacific (BA&P) Railway property, was acquired in 1985 by BGM Equipment Company (BGM) and leased to Rarus, an affiliate of BGM. In 2007, BGM was merged into Rarus. Rarus is now the owner and operator of the AWVRL. Authority to abandon the AWVRL and to discontinue operations are being sought by Rarus to facilitate environmental cleanup actions in and around Anaconda, Montana, in order to implement the remedy recommended by the U.S. Environmental Protection Agency (EPA) under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).⁴ EPA issued a Unilateral Administrative Order (UAO) requiring Rarus, BGM and the Atlantic Richfield Company, Respondents to the Order, to address potential or actual threats to public health and the environment posed by the release of arsenic and heavy metal contaminants from the bed of the AWVRL in and near the city of Anaconda, Montana. EPA's UAO is presented in Exhibit C. EPA's approved remedy design for contaminated railroad beds, including the AWVRL, includes the design of engineered covers and barriers to prevent direct contact with contaminated soils and access to contaminated railroad bed materials and/or removal and replacement of contaminated materials. It is anticipated that removal of the track structure would be consistent with response action measures (including mine waste removal) that

⁴ 42 U.S.C. § 9601 *et seq.* CERCLA, commonly known as Superfund, was enacted by Congress on December 11, 1980 and provided broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment.

would significantly reduce or eliminate environmental concerns associated with the railroad bed materials. As further described in Section 1.4 of this EA, EPA has reviewed and approved the Respondents' remedial design and a Work Plan outlining the implementation of the remedial design for the AWVRL. Rails and ties on the AWVRL remain in place. If abandonment authority is granted, removal of the rail, ties and ballast would occur in conjunction with implementation of the EPA remediation. Additionally, it is anticipated that the AWVRL railroad bed would be conveyed to the State of Montana to be used as a transportation, trail, and/or utility corridor.

As shown on Exhibit A, the AWVR generally extends from west of the West Anaconda Yard (located in the north-central portion of Anaconda) to the Brown's Siding located at the Anaconda Lime Quarry.

The entire AWVRL lies within the boundaries of the Anaconda Smelter Superfund Site more specifically within the Active Railroad Beds Remedial Design Unit (RDU) of the Anaconda Regional Water, Waste & Soils (ARWW&S) Operable Unit (OU) portion of the Anaconda Smelter Superfund Site. Exhibit D presents a map of the Anaconda Smelter Superfund Site and the ARWW&S OU.

1.3 History of the AWVRL and Anaconda Smelting District

Mining and Smelting Operations

Historically, Anaconda has been a milling, smelting, and refining district. The Anaconda Smelter Superfund Site is located at and near the location of the former Anaconda Minerals Company ore processing facilities. These facilities were developed to remove copper from ore mined in Butte from about 1884 through 1980, when the smelter closed. Milling and smelting produced wastes with high concentrations of arsenic, as well as heavy metals including copper, cadmium, lead and zinc. EPA has determined that these contaminants pose potential risks to human health, to aquatic vegetation and animals in nearby streams, and to terrestrial plants and animals. The Anaconda Smelter Superfund Site encompasses the town of Anaconda, agricultural pasture and rangeland, forests, and riparian and wetland areas, some of which contain large volumes of wastes, slag, tailings, debris, and contaminated soil, ground water, and surface water

from copper and other metal ore milling, smelting, and refining operations conducted on site by the Anaconda Copper Mining Company, and its predecessors and successors from approximately 1884 to 1980. As identified in EPA's ARWW&S Record of Decision (ROD),⁵ the ARWW&S OU covers approximately 300 square miles in the southern Deer Lodge Valley and the surrounding foothills area within the Anaconda Smelter Superfund Site.

Rail Operations

The AWWRL was originally part of the BA&P Railway, which was incorporated on September 30, 1892. BA&P was owned by the Anaconda Minerals Company. Construction of a rail line between the mining sites in Butte and the smelting site in Anaconda began the same year and spanned a fourteen-month period, from October of 1892 to December of 1893. The BA&P line linked the Anaconda Minerals Company's mines in Butte with its smelters in Anaconda (approximately 26 miles), providing greater and more efficient transportation for Anaconda Minerals Company's copper production. The BA&P line ran across the Butte Hill, between Butte and Anaconda, through Anaconda on the north side of the town, and entered the main yard on Anaconda's west side (the West Anaconda Yards).

In the late 1800s, the Anaconda Minerals Company also acquired a lime quarry approximately five miles west of Anaconda, known as the Brown's Quarry. In 1898, an approximate five-mile spur (the AWWRL) was constructed by BA&P in order to connect the smelter in Anaconda with the Brown's Quarry, which became the principal source of limestone for the Anaconda Smelter. The location of Brown's Quarry is shown on Exhibit A. Historically, limestone was transported by rail from the Brown's Quarry to the Anaconda Smelter on the AWWRL line. At some point in the 1970s, however, all of the limestone shipped from the Brown's Quarry began moving by truck, rather than rail.

The startup of operations at the Berkeley Pit in Butte in 1955 greatly increased traffic on the BA&P. Large quantities of low-grade ore were moved from Butte to processing facilities in Anaconda. However, in the 1960s and early 1970s, changes in mining and processing

⁵ EPA, 1998. Record of Decision, Anaconda Regional Water, Waste & Soils Operable Unit, Anaconda Smelter Superfund Site. Anaconda MT.

methodologies resulted in reduced traffic on the BA&P. The completion of the Weed Concentrator near the mines in Butte in 1964 reduced the amount of ore requiring transport to Anaconda to one trainload per day, down from about twelve trainloads a day previously. The Anaconda Company became a wholly-owned subsidiary of The Atlantic Richfield Company on January 12, 1977, and that subsidiary merged into The Atlantic Richfield Company on December 31, 1981. The closure of the Anaconda smelter in Anaconda by The Atlantic Richfield Company in 1980 eliminated almost all of the BA&P main line traffic, as well as use of the AWWRL.

In July of 1984, the BA&P filed an application for abandonment⁶ with the predecessor of the STB, the Interstate Commerce Commission (ICC).⁷ In March 1985, subsequent to filing the application for abandonment, the BA&P and the State of Montana entered into an agreement by which the BA&P donated a portion of its line, and sold the remainder to the State of Montana, after which the BA&P withdrew its application for abandonment. Also in March 1985, the State of Montana leased the former BA&P line to Rarus, with an option to purchase the AWWRL.⁸ The railroad property was purchased by BGM, which was commonly controlled with Rarus, from the State of Montana in 1990. Recently, BGM was merged into Rarus.

Rarus currently owns and operates the BA&P rail line between Anaconda and Butte, a distance of 25.7 miles. At the siding at Silver Bow, Montana, approximately six miles west of Butte and 20 miles east of Anaconda, Rarus has interchanges with the Union Pacific and Burlington Northern railroads. The 4.7-mile section of rail line that Rarus seeks to abandon, the AWWRL, represents the westernmost portion of the former BA&P property in Anaconda.

Rarus has not run a train on the AWWRL since it began operation of the former BA&P lines in 1985. The Brown's Quarry, or as it is now known, the Anaconda Lime Quarry, is currently owned and operated by The Atlantic Richfield Company, and lime from the Anaconda

⁶ Docket No. AB-235, Butte, Anaconda & Pacific Railway. Co. - Abandonment - in Deer Lodge and Silver Bow Counties, MT.

⁷ The ICC Termination Act of 1995, Public Law No. 104-88, 109 Stat. 803, which was enacted on December 29, 1995, and took effect on January 1, 1996, abolished the Interstate Commerce Commission and transferred certain rail functions and proceedings to the Board.

⁸ See ICC Finance Docket No. 30640, Rarus & BGM Railway Company -- Exemption from 49 U.S.C. 10901 and 11301.

Lime Quarry is primarily used as an additive and tilled into soil for the Anaconda Smelter Superfund Site reclamation projects. Such lime is hauled exclusively by truck, as the quarry is located in close proximity to Montana Highway 1.

1.4 AWWRL Relationship to CERCLA Activities

The entire AWWRL lies within the boundaries of the Anaconda Smelter Superfund Site. The Anaconda Smelter Superfund Site was established to address contamination related to mining and mining-related activities in and around Anaconda. The Anaconda Smelter Superfund Site is located at the southern end of the Deer Lodge Valley, at and near the location of the former Anaconda Minerals Company smelting facilities. These facilities were developed to smelt copper from ore and ore-concentrate mined in Butte from about 1884 through 1980, when the smelters closed. The Anaconda Smelter Superfund Site was listed on the National Priorities List in September 1983⁹ and encompasses approximately 300 square miles.

The Anaconda Smelter Superfund Site has been divided into smaller units called “operable units” based on geography and risk to human health and the environment. The AWWRL is located in the ARWW&S OU, which was divided into two RDUs or geographic areas: The Active Railroad Bed RDU and Adjacent Railroad Bed RDU.¹⁰ The AWWRL is located in RDU 5 of the Anaconda Active Railroad Bed. The Anaconda Active Railroad Bed RDU was further divided into two portions: East and West. The AWWRL lies within the West portion of the Anaconda Active Railroad Bed RDU 5. A number of environmental studies and investigations have been conducted within the Anaconda Smelter Superfund Site over approximately the past twenty years pursuant to the CERCLA. In the course of conducting these environmental investigations and studies, much data and other environmental information have been collected. As shown in Exhibit D, the Anaconda Smelter Superfund Site is one of three related and contiguous Superfund sites in southwestern Montana.

Rarus seeks the Board’s authority for abandonment and discontinuance of operations on the AWWRL as part of the cleanup activities mandated by EPA under EPA’s UAO. Because the

⁹ 48 Fed. Reg. 40658.

¹⁰ The “Active Railroad Bed” is somewhat of a misnomer as it includes active and inactive railroad lines.

AWVRL and other railroad rights-of-way in and around the Anaconda area have been identified as containing elevated levels of arsenic and heavy metals that present environmental concern, EPA's UAO requires the Respondants to address potential or actual threats to public health and the environment posed by the release of contaminants from mine wastes historically used to construct the railroad lines. If abandonment authority is granted, and as part of EPA-approved remediation, it is contemplated that the AWVRL railroad right-of-way (ROW) would be made available to enhance the adjacent highway corridor. Exhibit E presents the 2006 Real Property Conveyance Agreement between The Atlantic Richfield Company, Rarus, BGM and the Montana Department of Transportation (MDOT) to convey the AWVRL ROW to MDOT once it has been remediated. The ROW may also be used as a trail and/or utility corridor. The cleanup plan, approved by EPA, would achieve EPA's performance standards. Exhibit F presents the Final RDU 5 Anaconda Active Railroad Beds RAWP/FDR,¹¹ which details the EPA-approved remedial design.

The RAWP/FDR applicable to the AWVRL includes removal of the rails, ties and ballast. Engineered covers and barriers would be installed to provide erosional stability to the AWVRL railroad embankment. However, as noted above, abandonment authority is required before any such cleanup actions can proceed.

1.5 NEPA and Implementing Regulations

Procedures for the implementation of environmental laws applicable to the AWVRL abandonment are designed to assure adequate consideration of environmental factors in the Board's decision-making process pursuant to the National Environmental Policy Act, 42 U.S.C. § 4321, *et seq.* and implementing regulations in 49 Code of Federal Regulations (CFR) § 1105 *et. seq.*, the Energy Policy and Conservation Act, 42 U.S.C. § 6362 (b). Additionally, this EA has been prepared to consider related laws, including the National Historic Preservation Act (NHPA), 16 U.S.C. § 470, *et seq.*, the Coastal Zone Management Act, 16 U.S.C. § 1451 *et seq.*, the Endangered Species Act, 16 U.S.C. § 1531, *et seq.*, and CERCLA, as appropriate. Because

¹¹ Atlantic Richfield Company, 2003. Remedial Design Unit (RDU) 5 Anaconda Active Railroad Beds, Remedial Action Work Plan/Final Design Report (RAWP/FDR), Anaconda Regional Water, Waste & Soils Operable Unit, Anaconda Smelter Superfund Site, Anaconda, MT.

the AWWRL is located within a Federal Superfund Site, CERCLA regulations and requirements apply.

1.6 Public Use

If abandonment authority is granted, and the railroad ties and ballast are removed, and the EPA-recommended remedial activities are implemented, Rarus believes that the AWWRL ROW would be suitable for other public use. Attachment E is the 2006 Real Property Conveyance Agreement between the Atlantic Richfield Company, Rarus, BGM and the MDOT to convey the AWWRL ROW to MDOT if abandonment authority is granted and the ROW is remediated. MDOT currently anticipates using the ROW to enhance the transportation corridor of the adjacent state highway. Future enhancement for development as a transportation, trail and/or utility corridor within the current ROW would be addressed by the MDOT.

2.0 DESCRIPTION OF THE EXISTING ENVIRONMENT

This section provides an overview of the existing environment in the vicinity of the proposed abandonment, including a description of the source, nature, and extent of contamination within the ROW, adjacent land use, and ecosystems.

2.1 Land Use

The historic land use of AWWRL ROW has been a transportation corridor. Current adjacent land use along the eastern half of the AWWRL ROW through Anaconda is predominantly residential. Along the eastern section of the AWWRL ROW, along Montana Highway 1 and within the City of Anaconda, some commercial land use exists. The westernmost half of the AWWRL ROW is located outside the City of Anaconda, and adjacent land use for any undeveloped land is currently zoned as agricultural under the approved Anaconda/Deer Lodge County (ADLC) Growth Policy.¹² The current and reasonably anticipated future land use for the AWWRL within the ARWW&S OU is a transportation, trail, and/or utility corridor.

¹² ADLC, 2005, Anaconda-Deer Lodge Growth Policy, December .

2.2 Transportation

The AWWRL has not been abandoned, and therefore, is currently identified as an active railroad bed; rails and ties remain in-place. Since at least 1926, AWWRL provided service only to the Brown's Quarry, otherwise known as the Anaconda Lime Quarry. The quarry is owned by The Atlantic Richfield Company, which currently uses trucks to periodically transport small quantities of materials from the quarry to various local destinations because the quarry is located in proximity to Montana Highway 1. As described in detail in Section 1.3, the AWWRL has not had active rail traffic since before 1985. If the rail line was used, The Atlantic Richfield Company, owner of the Anaconda Lime Quarry, would be the only potential customer on the AWWRL. No sidings, other than the Brown's Siding located at the Anaconda Lime Quarry, exist in the West Valley District, and all limestone from the Anaconda Lime Quarry moves by truck rather than rail. As the land use along the AWWRL is primarily residential and agricultural (typified by small-scale farming/ranching activities), demands for rail service from future customers are not anticipated.

Current ownership of rail lines operating within ADLC includes: Burlington Northern/Santa Fe Railway Company and Rarus. These rail lines both make connections to the Union Pacific rail line at Silver Bow, Montana approximately 20 miles east of Anaconda.

2.3 Source, Nature, and Extent of Contamination Associated with the Railroad Bed

The AWWRL railroad bed is located adjacent to residential, commercial, and agricultural areas in and near Anaconda. The bed of the AWWRL is generally characterized by contaminated ballast associated directly with the railroad grade. The primary contaminant of concern (COC) identified by EPA is arsenic. Elevated arsenic concentrations identified along the railroad grade are believed to be the result of importation of contaminated material during bed construction. Other potential COCs include lead, cadmium, copper, and zinc. The primary potential environmental exposure pathways are erosion and suspension of materials comprising the bed and ballast of the AWWRL that contain COCs and transport of those materials by storm water runoff.

The Anaconda area experiences brief, but sometimes intense, thunderstorms, especially late in the summer. The physical condition (e.g., unvegetated or poorly vegetated railroad bed slopes), combined with climatic conditions, may cause contaminants to be released and transported in surface water flow. Portions of the AWWRL are in proximity or directly adjacent to the perennial Warm Springs Creek and associated wetlands. The railroad bed also includes one crossing of Warm Springs Creek approximately 0.3 miles west of Anaconda. Therefore, storm water from the rail grade has the potential to impact down-gradient public use/residential areas and Warm Springs Creek.

Railroad bed characterization data from several sample collection efforts undertaken by the Respondents to EPA's UAO, identified in Section 1.4, have been compiled. Two relevant reports include the *Anaconda Residential Soils, Regional Soils, and Railroad Area Data Interpretative Report*,¹³ which presents sampling results from surface sampling (0 to 2-inch depth interval) conducted on the rail beds in the fall of 1997 and the spring of 1998. During this investigation, surficial sampling of arsenic, cadmium, copper, lead, and zinc concentrations was conducted. From this sampling investigation, it was concluded that arsenic concentrations in the surface samples collected from the AWWRL bed generally exceeded 1,000 milligrams per kilogram (mg/kg), the arsenic action level established by EPA for recreational and future commercial/industrial use. Additional sampling performed in the summer of 2003 further refined the depth and extent of the arsenic contamination present in the railroad bed embankment. This data is presented in the *Draft Final West Valley Railroad Bed Investigation Data Summary Report (DSR)*.¹⁴ Using the comprehensive soil database compiled from all the characterization efforts, EPA has determined that the entirety of the AWWRL bed is contaminated and requires remediation.

The Baseline Human Health Risk Assessment (BHHRA)¹⁵ for arsenic, undertaken by the EPA for residential, commercial/industrial and open space/recreational areas for the Old

¹³ AERL, 1999. Anaconda Residential Soils, Regional Soils, and Railroad Areas, Data Interpretive Report,

¹⁴ Atlantic Richfield, 2003. Draft Final West Valley Railroad Bed Investigation Data Summary Report (DSR), Anaconda Smelter NPL Site, Community Soils OU,

¹⁵ CDM Federal. 1996. Final Baseline Human Health Risk Assessment, Anaconda Smelter Superfund Site, Anaconda

Works/East Anaconda Development Area (OW/EADA) OU, for the Anaconda Smelter Superfund Site. For consistency, EPA continues to apply these action levels to the remaining commercial/industrial and recreational/open space land use areas within the ARWW&S OU. The BHHRA established levels at which a remedial action would be taken for the Anaconda area, including AWWRL. Since there are no specific Federal or State Applicable or Relevant and Appropriate Requirements (ARARs) for arsenic and lead in soil or waste material, the action levels were established through site-specific analyses. To ensure that people in the Anaconda area are not exposed to unsafe levels of arsenic or heavy metals, the EPA established the amount of chemical toxicity that could be present in the adjacent soils in residential areas before remedial actions were required. Cleanup activities were posed for those areas that the EPA determined posed a potential threat to human health and the environment.

Generally, elevated concentrations of arsenic and heavy metals in railroad beds are due to the use of mineralized materials in the subgrade, bed fills, or ballast. Surficial soil samples presented in relevant reports indicate some areas on the railroad bed, side slopes, and adjacent areas exceed applicable open space/recreational action levels for arsenic concentrations. The EPA determined that the potential short-term impacts from contaminated railroad bed would be adequately mitigated through implementation of its approved remedial designs.

Overall, the sampling data demonstrates that mine wastes used in the construction of the original railroad bed fills and for ballast are essentially confined to the bed and ballast areas. The EPA's recommended remedy for railroad bed soils on the AWWRL is a removal of the rails, ties and ballast material as described in the EPA-approved design. The EPA understands that in order to carry out its cleanup plan, the Board's permission to abandon the line must first be obtained. The remedial design is consistent with future land use being a transportation, trail, and/or utility corridor.

2.3.1 Human Health Risks

The EPA's BHHRA¹⁵ evaluated potential human health risks associated with chemicals of potential concern found in soils, dust, and groundwater in areas of the Anaconda Smelter Superfund Site not addressed in previous risk assessments. Following a review of available data,

contaminants of potential concern for the Anaconda Smelter Superfund Site were determined by the BHHRA to be arsenic in the soil and arsenic in the groundwater. Risk-based screening levels were developed for arsenic, the primary human health COC, based on residential, commercial/industrial, and open space/recreational scenarios. Screening levels for soil were developed based on exposure pathways for each scenario, including exposure due to ingestion or inhalation of surface soils, interior dust or surface water and dermal absorption via surface water.

EPA has determined that the response actions it recommends for the AWWRL would minimize any potential human health risks by removing the waste materials to isolate the wastes from human contact and minimize erosion and down-gradient transport. These actions are expected to permanently address potential health risks.

2.3.2 Ecological Risk

The Baseline Environmental Risk Assessment (BERA)¹⁶ for the Site identified several wildlife receptors as having the potential for deleterious exposures to arsenic and heavy metals. Excess risk to wildlife, not necessarily related to materials in the bed of the AWWRL but to conditions associated with the rest of the Anaconda Smelter Superfund Site, has been suggested based on modeling exercises evaluating contaminant uptake from foraging, food chain transfer, drinking water, and direct ingestion of contaminated soils. Any ecological risk that would be associated with contaminants in the bed of the AWWRL would be addressed through EPA's recommended cleanup activities. No other significant ecological risks associated with the railroad bed in the Anaconda area are anticipated to be identified.

Surface water quality monitoring was performed along an 11-mile reach of Warm Springs Creek, a perennial stream which flows adjacent to the AWWRL, from 1985 to 1999. The dissolved fractions of COCs collected from water sampling were compared to chronic and acute aquatic life standards, as per National Ambient Water Quality Criteria protocol, and no exceedances were recorded at any of the sampling stations.¹⁷

¹⁶ EPA, 1997. Final Baseline Environmental Risk Assessment, ARWW&S OU. Prepared by CDM Federal for EPA. October 1997. Volumes I-II.

¹⁷ Atlantic Richfield Company, 2005 – ARWW&S OU Warm Springs Creek Surface Water Management Plan.

2.4 Hydrology

Warm Springs Creek is a perennial stream located adjacent and in proximity to portions of the A WVRL railroad bed. Warm Springs Creek originates west of the city of Anaconda in the Pintler and Flint Creek Mountain Ranges and drains approximately 163 square miles to the confluence of Silver Bow Creek, near the town of Warm Springs. As shown on Exhibit A, the A WVRL crosses Warm Springs Creek once approximately 0.3 miles west of Anaconda. After this crossing, the creek flows southwest of the railroad grade. Due to the proximity of the creek to the railroad bed, there is currently the potential for railroad bed materials with elevated concentrations of COCs to erode into the stream.

Warm Springs Creek is classified as B-1 (suitable for a drinking water, propagation of salmonoid fish and associated aquatic life, and other uses) by the State of Montana. Dissolved and total metals concentrations (i.e. arsenic, cadmium, copper, lead, zinc) were observed to be primarily near or below the laboratory analytical detection limits. However, total arsenic and copper concentrations appear to increase from monitoring stations upstream to downstream of the city of Anaconda and its former ore-processing facilities. Arsenic and heavy metal contaminants may also impact storm water runoff to Warm Springs Creek. The EPA-approved remedial design for the A WVRL railroad bed would remove the source of COCs with the potential for any erosion and transport of contaminated railroad bed materials.

2.5 Vegetation

The habitat types associated with the A WVRL are primarily uplands located to the northeast of the railroad bed. Historically, railroad beds do not have vegetation. Some grass and willow has grown along grade as a result of lack of use. The eastern extent of the A WVRL is associated with residential and commercial areas within or near the city limits of Anaconda. Human activity in Anaconda and along Warm Springs Creek has historically resulted in varying degrees of disturbance to the native vegetation and habitat of the area. Sources of disturbance include construction of railroad bed, industrial activities, and residential and commercial use. The existing vegetation of the area reflects this history of disturbances. The western extent of the A WVRL is less developed and is thus associated with more native habitat types.

The Anaconda Smelter Superfund Site encompasses a wide variety of habitat types, including riverine, streamside herbaceous, shrubland, upland grass-shrub and deciduous tree groves, and agricultural land. All these habitat types are located adjacent or in proximity to the AWVRL. General vegetation characteristics were also evaluated in a field assessment along the railroad ROW. Current vegetation cover within the railroad ROW was composed primarily of grasses and weedy species. Herbaceous species identified along the railroad grade included Great Basin wildrye (*Elymus cinereus*), wheatgrass (*Agropyron spp.*), redtop (*Agrostis alba*), Indian ricegrass (*Oryzopsis hymenoides*), and jointed horsetail (*Equisetum spp.*). Spotted knapweed (*Centaurea maculosa*), a problematic noxious weed, is common and abundant along the railroad corridor, ranging from 1 to 3 feet in height. Adjacent to the railroad grade, well-established stands of woody vegetation were observed, particularly along the western extent of the AWVRL, including aspen (*Populus tremuloides*) and rose (*rosa acuminatus*).

A search of the Montana Natural Heritage Program (MNHP) database identified no federally threatened or endangered plant species occurring in Deer Lodge County. Additionally, a study and survey of plants listed by the MNHP as sensitive was included in the review process. During the survey, two plant species listed by the MNHP as sensitive were discovered within the Anaconda Smelter Superfund Site study area.¹⁸ These were annual paint brush (*Castilleja exilis*) and graceful arrowgrass (*Triglochin concinnum*). Taxa (i.e., species, subspecies, or species varieties) included on this list were evaluated and ranked based on both their global (range-wide) and statewide status. However, neither plant species were found in proximity to the AWVRL.

2.6 Cultural Resources

The AWVRL is a section of the former BA&P Railway, which has been identified as a significant historical district and was listed on the *National Register of Historic Places* in September of 1988. The BA&P Historic District encompasses the railroad ROW which begins in Butte and travels to Anaconda, generally along the course of Silver Bow Creek. The entire

¹⁸ ARCO, 1994. Wetlands and Threatened/Endangered Species Inventory with Determination of Effective Wetland Areas, Anaconda Smelter Superfund Site, May 1994. Prepared by EA Engineering, Science & Technology. AERL, 1999. Wetlands and Threatened/Endangered Species Inventory with Determination of Effective Wetland Areas, Anaconda Smelter Superfund Site, May 1999. Prepared by R2 Resource Consultants. Redmond, WA.

BA&P Historic District includes 750 acres, and includes an intact collection of railroad buildings and structures. Its significance is related to the nature and methods of mine transportation and the historic mining fabric of the Butte and Anaconda area, specifically its associations with late 19th century railroad expansion in Montana, the copper mining and smelting industry, and railway electrification and hydro-electric power development.

BA&P properties, besides the railroad ROW, included within BA&P Historic District comprise an intact collection of railway buildings and structures, ca. 1890-1938, including depots, section houses, offices, a roundhouse and turntable, bridges, and a variety of other repair and maintenance facilities. The West Anaconda Yards, located within the BA&P Historic District directly east of the AWWRL project area, represent one of the most intact examples of 19th century railroad shop facilities in the western US, according to the National Register of Historic Places Inventory Nomination Form for the BA&P Railway Historic District.

Other historic districts within the City of Anaconda include: the Anaconda Commercial Historic District, the Goosetown Historic District, and West Side Historic District. These Historic Districts, also listed on the *National Register of Historic Places*, are located east of the AWWRL project area, in the general vicinity of downtown Anaconda. These areas were nominated to the *National Register of Historic Places* in 1998. The significance of these Historic Districts is related to commerce and trade at the turn of the century, as well as early American exploration and settlement. These districts exhibit architectural styles of the late 19th and early 20th century American movements, late Victorian, and late 19th and 20th century revivals. The Anaconda Company Smoke Stack, located on Smelter Hill in Anaconda, is also listed in the *National Register of Historic Places*.

The creation of a Heritage Park in Anaconda and Butte is identified as a critical element of the Regional Historic Preservation Plan (RHPP), completed in 1993. As defined by the RHPP, the Heritage Park would be developed within functioning communities and would include neighborhoods, commercial and residential districts and trail, transportation, and/or utility corridors. The proposed Anaconda-Butte Heritage Park is organized around the creation of theme-related “Constellations.” These constellations might be likened to settings, which, when combined, tell the composite industrial, social, and occupational history of the area. As defined

by the RHPP, there are five identified constellations which would constitute the Heritage Park. The Brown's Lime Quarry and AWWRL, as part of the historic BA&P Spur to Southern Cross, are included in the "Smelting the Ore" Constellation. This constellation would be composed of resources that interpret smelting, foundry work, commercial and residential activity, natural resources, and transportation systems.

The cities of Anaconda and Butte have both been designated National Labor History Landmarks. The National Labor History Landmark Program recognizes areas that contributed to the history of the American labor movement across the United States. This distinction would bring opportunities for economic activities which could help support the preservation of Anaconda's unique historic and cultural resources.

2.6.1 Historic Preservation

The Anaconda Smelter Superfund Site has been the subject of extensive historic preservation research and planning. Generally, historic preservation issues have been addressed programmatically for the three Superfund Sites comprising the Upper Clark Fork River Basin Superfund Sites, including the Anaconda Smelter Superfund Site, rather than on a site-by-site basis. Currently, both the Second Programmatic Agreement prepared in 1994¹⁹ and a RHPP completed in 1993 are in place to guide historic preservation actions for the Upper Clark Fork River Basin Superfund Sites. As part of the former BA&P, the AWWRL was identified in the RHPP and 1994 Second Programmatic Agreement as a historical resource. The requirements of Second Programmatic Agreement apply to the EPA-recommended remedial action for the AWWRL.

The RHPP is the basic planning document detailing historic resources, their role, and concepts for their preservation and enhancement. From the predictions and goals set in the

¹⁹ An earlier Programmatic Agreement was signed in 1992 by EPA, the MDEQ, ARCO, the State Historic Preservation Office, the Advisory Council on Historic Preservation, and the local governments of Anaconda-Deer Lodge (ADL), Butte-Silver Bow (BSB), and Walkerville, which called for a programmatic approach to addressing historical resources throughout the area affected by Superfund activities. These entities worked together on the development of the RHPP. The first task in preparing the RHPP was a review and compilation of the existing historic properties and inventory information available in libraries and archives at the state and local level. The inventory information was entered in the Historic Resources Database. This information is geographically specific and is integrated with a geographic information system (GIS), a computer-based mapping system.

RHPP, procedures and mitigation approaches were established in the 1994 Programmatic Agreement, which implemented the applicable components of the RHPP in a legally binding agreement under the Historic Preservation Act. The RHPP was developed with community and local government involvement and was adopted as the planning document for all future environmental cleanup and preservation efforts within the region by county, state, and Federal historic authorities.

As stated in the 1994 Second Programmatic Agreement, the length of the BA&P Railway Corridor from Butte to Anaconda including the AWWRL is identified as a historic resource. The EPA-recommended remedial action for the AWWRL anticipates the salvage of tracks, ties and associated railroad appurtenances and disposal of the AWWRL right-of way. The 1994 Second Programmatic Agreement provides that, if it is necessary to destroy a resource, as required by EPA's remedy for the AWWRL, off-site mitigation would be undertaken. If the Board grants abandonment authority in this proceeding, it would be necessary to ensure that the process set forth in the Second Programmatic Agreement is satisfied.²⁰

No other historic and cultural features in the vicinity of the AWWRL would be impacted by either the proposed abandonment or remediation activities associated with the railroad bed.

2.7 Wildlife

Wildlife habitat and abundance varies along the extent of the AWWRL. The eastern portion of the rail line is primarily located in an urban environment. Terrestrial wildlife within portions of the rail line adjacent to residential areas is likely limited, and may include primarily small mammals and birds. The lack of vegetative overstory and other cover in residential areas

²⁰ Section 4 of the 1994 Second Programmatic Agreement – Off-Site Mitigation – states, “Based on the RHPP and [other jointly developed information], the unavoidable effects of the potential Superfund remedial actions shall be mitigated as described below: ARCO and the affected communities and the signatories to this PA agree that the following actions along with on-site mitigation fully mitigate for all unavoidable impacts or losses of known historic properties in BSB and ADL counties.”

Section 4.B. – Anaconda-Deer Lodge – identifies three off-site mitigation requirements for Anaconda-Deer Lodge County including: 1) “ARCO would provide to Anaconda Deer Lodge the sum of \$33,000 as matching funds for completion of a Community Architectural and Historical Survey of historic properties in Anaconda;” 2) “ARCO would provide matching funds in the amount of \$5,000 to ADL for the Historical Data Presentation grant;” and 3) “ARCO, in consultation with ADL, shall design and construct an interpretive trail at the Old Works. The trail shall include interpretive signage detailing the history of smelting in Anaconda...”

likely precludes the occupation of the area by large, non-domestic mammals. Along the western portion of the AWWRL which is less urban in nature, as well as areas adjacent to wetlands associated with Warm Springs Creek, larger mammals (e.g. deer, elk) may forage and find cover within woody vegetation, as well as migrate through the area. Open agricultural land and pastures along the western extent of the AWWRL may also provide hunting habitat for predatory bird species. Birds, large and small mammals, amphibians, reptiles, and fish species likely also inhabit upland areas adjacent to the western portions of the AWWRL, as well as wetland and riverine habitats associated with Warm Springs Creek.

A complete listing of species known or expected to occur at the Anaconda Smelter Superfund Site is included in Appendix 5 of the EPA's Final BERA.

2.7.1 Threatened, Endangered, and Sensitive Species Inventory

The STB is required by the Endangered Species Act to consult with the U.S. Fish and Wildlife Service (USFWS) on potential impacts to threatened, endangered, and sensitive species. Consultation on Superfund-related issues within and near the area of the AWWRL was initiated as early as 1992 by the EPA and is ongoing,

Of wildlife species with the potential to occur within the general Anaconda area, the bald eagle (*Haliaeetus leucocephalus*) and the peregrine falcon (*Falco peregrinus*) are federally listed by the USFWS as endangered. The Montana arctic grayling (*Thymallus arcticus montanus*) is listed as a Category 1 species, indicating that substantial biological information is on file to support the appropriateness of proposing the species as endangered or threatened.

During field surveys, no federally listed threatened or endangered animal species were observed within the Anaconda Smelter Superfund Site. To date, no breeding or nesting places for endangered avian species have been identified in the area of the AWWRL. It was also determined that suitable habitat for the arctic grayling does not exist within the Anaconda Smelter Superfund Site. There are no records of the species occurring in the Warm Springs Creek or nearby drainages.

During a field survey conducted in 1991, one state sensitive species, the Swainson's hawk, was observed within the Anaconda Smelter Superfund Site. However, this observation was not made in proximity to the AWWRL.

2.8 Wetlands

Wetlands were assessed broadly in the Anaconda area in an effort to identify jurisdictional wetlands occurring in the Anaconda Smelter Superfund Site in 1994 and again in 1999. Additional wetland evaluations have occurred from 2003 through 2006. During these field investigations, wetlands were delineated along the AWWRL. Wetland resources adjacent to the AWWRL are primarily associated with perennial Warm Springs Creek. Delineated wetlands are located along the northeast side of the railroad bed, as well as at the railroad stream crossing (approximately 0.3 miles west of Anaconda). Wetland habitat types along the AWWRL, based on surveys of other nearby areas, likely include: riverine, streamside herbaceous, wet meadow, mixed graminoid-forb meadow, willow dominated shrub communities, and aspen thickets.

In field assessments, the Upper Warm Springs Creek wetland complex, which includes wetlands adjacent to the AWWRL, received high ratings in the Wetland Function Evaluation for hydrologic support, floodflow alteration, water purification, aquatic diversity and abundance, and wildlife diversity and abundance, specifically breeding. This wetland area ranked highest for overall wetland function among all the wetlands surveyed in the Anaconda regional area. Wetlands here were identified as having good vegetation cover. Woody species identified along the upper portion of Warm Springs Creek during wetland field assessments include aspen (*Populus tremuloides*), willow (*Salix spp.*), alder (*Alnus spp.*), and rose (*Rosa spp.*). Dominant herbaceous species included sedge (*Carex spp.*), bentgrass (*Agrostis spp.*), and rush (*Juncus spp.*).

2.9 Air

Though not associated specifically with the AWWRL, air quality within the Anaconda area has been extensively monitored with regard to total suspended particulates (TSP) and associated metals concentrations. The following paragraphs summarize the monitoring efforts and results.

An initial Screening Study was performed by the Anaconda Company in 1983. This initial effort was undertaken under a Study Agreement with the EPA following shut down of the smelting facility in Anaconda to evaluate potential impacts from historic smelter operation. The resulting report was used as supporting information for the Final Remedial Investigation (RI)/Feasibility Study (FS) reports for the Anaconda Smelter Superfund Site. The Study resulted in the conclusion that ambient air quality data after the smelter shutdown through 1983 was in compliance with applicable air quality standards. The West Valley area is up-wind from the historic smelter location and less impacted than the areas monitored in 1983.

For the Final RI Report completed for the ARWW&S OU,²¹ air quality monitoring was conducted in the Smelter Hill subarea, which includes the location of the former copper smelting facility, known as the Anaconda Reduction Works, where copper ore mined in Butte, Montana was processed. The facility operated continuously from 1902 until 1980, after which it was completely demolished except for the brick smoke stack and several small, ancillary facilities. Air quality monitoring at the Smelter Hill subarea occurred during a three-year period and utilized four stations equipped with high volume PM-10 samplers, 13 dustfall stations, and three meteorological stations. The PM-10 samples measured the 24-hour concentrations of PM-10 particulate; and concentrations of total arsenic, beryllium, cadmium, copper, lead, and zinc in particulate with a diameter of less than 10 microns. Wind direction and wind speed were monitored.

Results from meteorological monitoring indicate that predominant wind direction in Anaconda during the period from August 1989 to June 1992 varied from west to southwest, and the average annual wind speed ranged between 8.5 to 12.7 miles per hour (mph). The average annual temperature at the site varied from 40 to 45 degrees Fahrenheit, and the average annual total precipitation fluctuated from 7.4 to 10.8 inches.

During the monitoring period from August 1989 to June 1992, there were no exceedances of Federal or State ambient air quality standards for 24-hour and annual PM-10 mass concentrations, or quarterly average lead concentrations. A total of four exceedances of the State

²¹ ARCO, 1996. Final Remedial Investigation Report. Anaconda Regional Water & Waste Operable Unit. February 1996.

ambient air quality guidelines for non-criteria air pollutants were observed, three at the Zinc Processing station (2 copper, 1 arsenic), and one at the Mill Creek Park station (arsenic). A total of twenty-one exceedances of the State's ambient air quality standard for settled particulate matter (10 grams per square meter per month ($\text{g/m}^2\text{-month}$)) were also observed during the three-year monitoring period. Results of the monitoring program indicate that the air pathway, particularly in the vicinity of the AWWRL, is not of concern, based on applicable regulatory standards.

Air monitoring of remediation construction workers has been periodically conducted by Jordan Contracting, Inc. (JCI), a contractor performing the EPA-recommended remedial construction at the Anaconda Smelter Superfund Site, to determine potential exposure to heavy metals in dust encountered by JCI employees. Samples from 2002 results were well below the OSHA Permissible Exposure Limits (PELs).²² Personal air monitoring of JCI employees was also conducted by students at Montana Tech University at the Opportunity Ponds (tailings ponds), located north of Anaconda, in the Spring of 2006.²³ All results were below the OSHA PELs.

Additionally, a July 2003 Industrial Hygiene Report produced for JCI during remediation of the Opportunity Ponds found that equipment operators onsite were exposed at levels well below the Recommended Control Limits.²⁴ In fact, most of the samples collected were below the laboratory detection limits for these parameters.

Also, as part of the RDU 8-Opportunity Ponds Dust Management Plan, air monitoring was conducted near the Opportunity Ponds between May 14 and June 28, 2006.²⁵ As outlined in the data report, all of the PM-10 filtered samples collected contained less than the 150

²² Atlantic Richfield, 2002. Final 2002 Stucky Ridge Remedial Action Construction Completion Report, Anaconda Smelter Superfund Site. Anaconda, MT.

²³ JCI, 2006. Analytical Summary of Personal Air Monitoring Conducted by Montana Tech Students.

²⁴ Liberty Northwest Insurance Corporation, 2003. Industrial Hygiene Report: Aspen Hills & Opportunity Pond A-Cells Reclamation Projects. Portland, OR.

²⁵ Atlantic Richfield, 2006. Remedial Design Unit 8 – Opportunity Ponds Dust Management Plan, Anaconda Regional Water, Waste & Soils Operable Unit, Anaconda Smelter Superfund Site. Anaconda, MT.

micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) regulatory limit for particulate and therefore did not require lead and arsenic analysis.²⁶

2.10 Noise

As the AWWRL is currently designated as an active railroad, noise levels would theoretically be reduced after abandonment of the rail line. Sensitive noise receptors are limited to residences along or in close proximity to the railroad bed. However, as previously noted, no trains have run on the rail line for at least 25 years. Thus, noise levels after abandonment would be similar to existing conditions. Temporary minor noise impacts associated with removal activities and cleanup would occur.

2.11 Energy

The AWWRL, historically a portion of the BA&P, has not historically transported significant energy resources. The BA&P was used almost exclusively to transport ore and ore-concentrate to smelting and refining facilities. Specifically, the AWWRL was historically used for the transport of limestone material used in the smelting process from the Lime Quarry to the smelter. Minor quantities of fuel resources (e.g., coal, timber, fuel oil, etc.) may have been transported during operation of the mining facilities prior to 1980. However, no energy resources have been transported after 1980 when the AWWRL was last used to support mine operations.

2.12 Safety

Since prior to 1985, the sole safety concern on and along the AWWRL has been the possibility of injury to trespassers. No equipment has operated on the AWWRL since before 1985. Safety concerns related to historic rail operations were related to the interaction of the train with vehicular and pedestrians at public road crossings. Rail operations are no longer occurring or anticipated, therefore these safety concerns are no longer an issue.

²⁶ Atlantic Richfield, 2006. Opportunity Ponds Remedial Design Unit Ambient Air Monitoring Program Semi-Annual Data Report – First Half 2006, Anaconda Regional Water, Waste & Soils Operable Unit, Anaconda Smelter Superfund Site. Anaconda, MT.

3.0 ENVIRONMENTAL IMPACTS OF ABANDONMENT

3.1 Land Use

No significant adverse impacts on land use are anticipated to result from abandonment of the AWVRL. Abandonment of the AWVRL and removal of its rails and ties and ballast would result in the timely cleanup of the ROW. SEA anticipates that beneficial land use impacts would result from removing contaminated soils that potentially pose a threat to the environment and future use of the ROW. If abandonment authority is granted and salvage and remediation of the right-of-way is undertaken, Rarus and The Atlantic Richfield Company would transfer ownership of the rail grade to the MDOT per the 2006 Real Property Conveyance Agreement between The Atlantic Richfield Company, Rarus, BGM, and the MDOT, presented in Exhibit E. Based on existing land use plans, the community, as it grows, expects to expand into the West Valley. Additionally, the proposed abandonment would enhance the community's ability to grow through the expansion of Highway 1.

3.2 Transportation

There would be limited effects on regional or local transportation systems and patterns if the proposed abandonment is approved because the AWVRL has not been used for rail transportation service since before 1985. The AWVRL has, since at least 1926, provided service only to the Brown's Siding at the Anaconda Lime Quarry. The Lime Quarry is partially reclaimed, and lime from the active portion of the quarry is hauled by truck for periodic, local use at Anaconda Smelter Superfund Site reclamation projects. Besides reclamation of the quarry itself, there is no anticipated future use of the lime quarry. The current and reasonably anticipated future land use for the AWVRL within the ARWW&S OU is a transportation, trail, and/or utility corridor.

3.3 Contamination Associated with the Railroad Bed

Elevated concentrations of arsenic and heavy metals exist in the AWVRL railroad bed. Data resulting from Superfund investigation activities has identified concentrations of arsenic above EPA action levels for industrial/open space areas in and along the AWVRL and that those materials in the rail bed present a potential environmental concern.

It is not anticipated that abandonment and removal of the rail and ties in the AWWRL, in and of themselves, would have significant positive effects on environmental exposure and transport of COCs. Removal of track structures would not change the extent or nature of the mine wastes in or on the ballast and underlying roadbed material in the railroad right-of-way. Abandonment and removal activities are necessary, however, to facilitate the EPA-recommended remediation activities, which includes the design of engineered covers and barriers to prevent direct contact with contaminated soils and access to contaminated railroad bed materials and/or removal and replacement of contaminated materials. EPA-recommended remediation of the ROW would eliminate direct human contact with mine wastes in the railroad bed and potential erosion and storm water transport of railroad bed materials.

Environmental exposures along the ROW would continue to be of concern if no remedial or response actions were to be implemented. Additionally, based on local and/or regional planning documents, the abandonment/removal of the AWWRL would be consistent with existing ADLC land use plans.

3.4 Vegetation

Given the overall lack of vegetation on the railroad grade, existing vegetation resources would not be impacted by the proposed abandonment and removal of the AWWRL. Vegetation suppression techniques along the grade have been used to minimize vegetation growth. However, abandonment and salvage activities may increase the potential for spread of noxious weeds. This impact would be mitigated by controlling areas where construction vehicles drive or park during abandonment. No federally listed threatened or endangered plant species occurring in Deer Lodge County, Montana have been recorded in the area of the AWWRL. Consultation and coordination with the USFWS is ongoing and would continue until EPA cleanup activities are completed.

3.5 Wildlife

Based on the available information and investigations to date, it is not anticipated that threatened or endangered species with the potential to occur within the general Anaconda area would be adversely affected by the proposed abandonment or the proposed response actions

required by the EPA. However, consultation and coordination with the USFWS is ongoing and would continue until EPA cleanup activities are completed.

3.6 Wetlands

The proposed abandonment and salvage activities would not contribute additional contamination to water bodies. The proposed abandonment and salvage of the rail line does not require the placement of dredged or fill material below the ordinary high water mark of the nation's rivers, streams, lakes or in jurisdictional wetlands; nor does it require the disturbance of stream banks. Moreover, no permits, review or approval under Section 404 of the Clean Water Act (33 U.S.C. § 1344) and Section 402 of the Clean Water Act (33 U.S.C. § 1342) is required for salvage of the AWWRL. The reclamation design, as identified in the RDU 5 RAWP/FDR, includes protective and mitigation measures for drainages crossed by the AWWRL grade. No adverse impacts to wetlands are anticipated. Consultation with the USACE is ongoing and would continue until EPA cleanup activities are completed. In a letter of August 3, 2007 to Pamela Sbar, Rarus's representative, the USACE indicated that based on the information provided by Rarus, the proposed project would not affect jurisdictional waters of the United States under the authority of Section 404 of the Clean Water Act.

3.7 Cultural Resources

The AWWRL, as part of the former BA&P Railway, has been identified as a significant historical resource and was listed on the *National Register of Historic Places* in 1988 as a Historic District. Several areas in downtown Anaconda have been designated as Historic Districts and listed on the *National Register of Historic Places*, including the Goosetown, West Side, and Commercial Districts. The various building and structures identified in Section 2.5 are not located within the 4.7 miles of the AWWRL ROW that is the subject of this abandonment proceeding and, as such, would not be impacted by the subject abandonment. The only historic resource potentially impacted by abandonment would be the track structures.

As described in Section 2.4, as part of the remediation requirements for the Clark Fork River Superfund Sites and, in order to comply with the NHPA, procedures and mitigation approaches were established in the 1994 Second Programmatic Agreement among the EPA

Region VIII office, the Advisory Council on Historic Preservation, the Montana State Historic Preservation Officer, the Montana Department of Environmental Quality, local governments of Butte/Silver Bow County, ADLC, the community of Walkerville, and The Atlantic Richfield Company regarding implementation of the CERCLA-related elements of the Upper Clark Fork River Basin regional Historic Preservation Plan. The EPA-recommended remedial action for the AWWRL would result in the destruction of an identified historic resource—the rails and ties in the AWWRL. The Second Programmatic Agreement states that if there are unavoidable impacts or losses to a known historic resource, as is the case with the AWWRL, the impacts or losses would be addressed via off-site mitigation measures specified in the agreement.

In a letter of May 13, 2008, the Montana Historical Society stated that the State Historic Preservation Officer believes that EPA's compliance with the 1994 Programmatic Agreement and Regional Historic Preservation also addresses STB's obligations under 36CFR 800 for consideration of impacts to historic properties.

Pursuant to 36 CFR 800.2, SEA conducted a search of the Native American Consultation Database at <http://home.nps.gov/nacd> to identify Federally recognized tribes, which may have ancestral connections to the project area. The database did not indicate any Tribes which may have an interest in the proposed abandonment and discontinuance.

3.8 Air

There should be no significant impacts on air quality because of the proposed abandonment and salvage of the AWWRL. Construction activities to remove the track structures could potentially result in some temporary particulate (dust) generation. However, this potential would be mitigated by provisions of the Design Report and Work Plan under the oversight of the EPA, which would require standard best management practices for dust suppression, such as suspending operations during periods of high wind and watering work areas.

3.9 Noise

Rail traffic on the AWWRL has not occurred for at least 25 years, therefore, there is little to no current ambient noise level associated with the AWWRL. However, removal and EPA-recommended remedial activities may create temporary noise that could impact adjacent

residents. Potential short-term noise impacts would be adequately mitigated, as required by EPA, through appropriate best management and construction practices, such as limiting removal activities to appropriate daytime hours. Any increase in noise impact to residents in the surrounding area would be minimized to the extent practicable through the use of these controls.

3.10 Energy

There would be no impacts on transportation of energy resources due to the proposed abandonment and salvage of the AWVRL. Since prior to 1985, the AWVRL has had no rail traffic. There are no plans for resuming rail transportation activities over the AWVRL.

Alternatives to the proposed abandonment would include denial (and therefore no change in operations), discontinuance of service without abandonment, and continued operation by another operator. In any of these cases, the existing quality of the human environment and energy consumption should not be affected.

4.0 ALTERNATIVES TO ABANDONMENT

Alternatives to the proposed abandonment would include denial (and therefore no change in operations (No Action), discontinuance of service without abandonment, and continued operation by another operator.

4.1 No Action Alternative

A potential alternative to abandonment and salvage of the AWVRL is a No-Action alternative. This would result in leaving the existing track structure in place and not abandoning the rail line. The available environmental information indicates that the “No-Action” alternative would limit the ability of Superfund response actions to mitigate contaminant exposure and transport. As previously stated, EPA’s approved remedy design for contaminated railroad beds, including the AWVRL, includes the design of engineered covers and barriers to prevent direct contact with contaminated soils and access to contaminated railroad bed materials and/or removal and replacement of contaminated materials. It is anticipated that removal of the track structure would be consistent with response action measures (including mine waste removal) that would significantly reduce or eliminate environmental concerns associated with the railroad bed

materials. Abandonment of a portion of the line is also not a feasible alternative, because it would similarly preclude the effective cleanup of the ROW.

Without abandonment and salvage of the AWVRL, EPA would be required to change its recommended remedy. EPA has determined that its recommended remedy is the most appropriate approach to address environmental issues with the AWVRL. Moreover, deterioration of the track structure as a result of weathering and other natural forces would continue. Any future use of the AWVRL for rail service would require that the existing rail and ties be substantially upgraded and improved. This is not economically feasible, particularly given the absence of any revenue-producing rail traffic on the line. Implementation of a No-Action alternative to the AWVRL would continue to have an impact on human health and environment.

4.2 Continued Operation

Another alternative to the proposed abandonment includes resumption of rail service by another operator and discontinuance of service without abandonment. In either case, conditions associated with the railroad bed which presently exist, if not mitigated, would continue to pose a potential threat to the public health, welfare or environment. Additionally, as stated in Section 4.1, the existing rail would require an economically infeasible replacement.

5.0 CONCLUSION

Based on the information presented in this EA and the anticipated implementation of EPA's remedial design for the AWVRL, SEA concludes that the proposed abandonment of the AWVRL would have no significant environmental impact. Under these circumstances, the environmental impact statement process is unnecessary.

6.0 SEA RECOMMENDED MITIGATION

Based on the information available to date, consultations with appropriate agencies, and extensive environmental analysis, SEA developed preliminary environmental mitigation measures to address the potential environmental impacts of the proposed abandonment. SEA emphasizes that the recommended environmental mitigation measures are preliminary. In order for SEA to effectively address the comments on this EA, it is critical that the public be specific

regarding any desired mitigation and the reasons for it. SEA preliminary recommends that the Board impose the following mitigation measures in any decision approving the abandonment exemption.

- As agreed to by Raus, Raus shall comply with the Environmental Protection Agency Action Remedial Design Unit (RDU) 5 Anaconda Active Railroad Beds, Remedial Action Work Plan/Final Design Report (RAWP/FDR), Anaconda Regional Water, Waste & Soils Operable Unit, Anaconda Smelter Superfund Site, Anaconda, MT (Final RAWP/FDR).
- As agreed to by Raus, Raus shall ensure that Best Management Practices are implemented to minimize fugitive dust emissions during construction transport activities.
- As agreed to by Raus, Raus shall use Best Management Practices to control any erosion, runoff, and surface instability during construction, including seeding, fiber mats, straw mulch, plastic liners, slope drains, and other erosion control devices.
- As agreed to by Raus, Raus shall consult with all necessary Federal, state, and local agencies, and comply with all reasonable requirements of the consulting agency, if salvage activities require the alteration of wetlands, ponds, lakes or streams or if these activities would cause soil or other materials to wash into these water resources.

7.0 PUBLIC USE

If the proposed abandonment and discontinuance of service is granted and the ROW is salvaged, a portion of the ROW may be suitable for other public use. A request containing the requisite four-part showing for imposition of a public use condition (49 CFR 1152.28) must be filed with the Board and served on the railroad within the time specified in the Federal Register notice.

8.0 TRAILS USE

A request for a notice of interim trail use is due to the Board, with a copy to the railroad, within 10 days of publication of the notice of the class exemption in the Federal Register. Nevertheless, the Board will accept late-filed requests as long as it retains jurisdiction to do so in a particular case. This request must comply with the Board's rules for use of rights-of-way as trails (49 CFR 1152.29).

9.0 PUBLIC ASSISTANCE

The Board's Office of Public Services (OPS) responds to questions regarding interim trail use, public use, and other reuse alternatives. You may contact OPS directly at (202) 245-0230, or mail inquiries to Surface Transportation Board, Office of Public Services, Washington, DC 20423.

10.0 COMMENTS

If you wish to file comments regarding this environmental assessment, send an **original and two copies** to Surface Transportation Board, Case Control Unit, Washington, DC 20423, to the attention of Phillis Johnson-Ball, who prepared this EA. Environmental comments may also be filed electronically on the Board's web site, www.stb.dot.gov, by clicking on the E-FILING" link. **Please refer to Docket No. AB- 260 (SUB- NO. 2X).** If you have any questions regarding this environmental assessment, please contact Phillis Johnson-Ball, the environmental contact for this case, by phone at (202) 245-0304, fax at (202) 245-0454, or e-mail johnson-ballp@stb.dot.gov.

Date made available to the public: June 27, 2008.

Comment due date: July 14, 2008.

By the Board, Victoria Rutson, Chief, Section of Environmental Analysis.

Vernon A. Williams
Secretary

Attachment

